

SEQUENCE LISTING

<110> LIVSHITS, VITALY ARKADIEVICH
ZAKATAEVA, NATALYA PAVLOVNA
ALCOSHIN, VLADIMIR VENYAMIOVICH
BELAREOVA, ALL VALENTINOVNA
TOKHMAKOVA, IRINA LVOVNA

<120> DNA CODING FOR PROTEIN WHICH CONFERS ON BACTERIUM
ESCHERICHIA COLI RESISTANCE TO L0-HOMOSERINE AND METHOD
FOR PRODUCING L-AMINO ACIDS

<130> 0010-1039-0

<140> 09/396,357

<141> 1999-09-15

<150> RU98118425

<151> 1998-10-13

<160> 2

<170> PatentIn Ver. 2.1

<210> 1

<211> 1200

<212> DNA

<213> Escherichia coli

<220>

<221> CDS

<222> (557)..(1171)

<400> 1

```

agaaataatg tggagatcgc accgcccacg gaatgtgcca gtatatagcg ttacgcccac 60
ggaccggggt gaacctcctg ctgccagaat gccgccagat catcaacata atcattaaag 120
cgattaacat gcccgagatg cggatcgggt aacaggcgac cggaacgtcc ctgcccgcga 180
tggtcgatga ttaagacatc aaaccccaaa tggaacaggt cataggccag ttccgcatat 240
tttacgtagc tetcaatacg ccccgggcag atgactacca cccggtcatg gtgctgtgcg 300
cgaaaacgga caaagcgcac cggaatgtca tccacaccag taaactctgc ttcatcacgc 360
tgacgccaga aatcagtcag cgggtcccatg gtaaaagcag caaacgcggt ttctcttggt 420

```

tcccagtcctt tttgctgctg aaacatcggg taatctgcct cttaaaccac gtaaaatcgt 480
 ttttttttagc gtgcctgaca caacgctgcg acagtagcgt attgtggcac aaaaatagac 540
 acaccgggag ttcatc atg acc tta gaa tgg tgg ttt gcc tac ctg ctg aca 592
 Met Thr Leu Glu Trp Trp Phe Ala Tyr Leu Leu Thr
 1 5 10
 tcg atc att tta acg ctg tcg cca ggc tct ggt gca atc aac act atg 640
 Ser Ile Ile Leu Thr Leu Ser Pro Gly Ser Gly Ala Ile Asn Thr Met
 15 20 25
 acc acc tcg ctc aac cac ggt tat ccg gcc ggt ggc gtc tat tgc tgg 688
 Thr Thr Ser Leu Asn His Gly Tyr Pro Ala Gly Gly Val Tyr Cys Trp
 30 35 40
 gct tca gac cgg act ggc gat tca tat tgt gct ggt tgg cgt ggg gtt 736
 Ala Ser Asp Arg Thr Gly Asp Ser Tyr Cys Ala Gly Trp Arg Gly Val
 45 50 55 60
 ggg acg cta ttt tcc cgc tca gtg att gcg ttt gaa gtg ttg aag tgg 784
 Gly Thr Leu Phe Ser Arg Ser Val Ile Ala Phe Glu Val Leu Lys Trp
 65 70 75
 gca ggc gcg gct tac ttg att tgg ctg gga atc cag cag tgg cgc gcc 832
 Ala Gly Ala Ala Tyr Leu Ile Trp Leu Gly Ile Gln Gln Trp Arg Ala
 80 85 90
 gct ggt gca att gac ctt aaa tcg ctg gcc tct act caa tcg cgt cga 880
 Ala Gly Ala Ile Asp Leu Lys Ser Leu Ala Ser Thr Gln Ser Arg Arg
 95 100 105
 cat ttg ttc cag cgc gca gtt ttt gtg aat ctc acc aat ccc aaa agt 928
 His Leu Phe Gln Arg Ala Val Phe Val Asn Leu Thr Asn Pro Lys Ser
 110 115 120
 att gtg ttt ctg gcg gcg cta ttt ccg caa ttc atc atg ccg caa cag 976
 Ile Val Phe Leu Ala Ala Leu Phe Pro Gln Phe Ile Met Pro Gln Gln
 125 130 135 140
 ccg caa ctg atg cag tat atc gtg ctc ggc gtc acc act att gtg gtc 1024
 Pro Gln Leu Met Gln Tyr Ile Val Leu Gly Val Thr Thr Ile Val Val
 145 150 155
 gat att att gtg atg atc ggt tac gcc acc ctt gct caa cgg att gct 1072
 Asp Ile Ile Val Met Ile Gly Tyr Ala Thr Leu Ala Gln Arg Ile Ala
 160 165 170
 cta tgg att aaa gga cca aag cag atg aag gcg ctg aat aag att ttc 1120

Leu Trp Ile Lys Gly Pro Lys Gln Met Lys Ala Leu Asn Lys Ile Phe
 175 180 185

ggc tcg ttg ttt atg ctg gtg gga gcg ctg tta gca tcg gcg agg cat 1168
 Gly Ser Leu Phe Met Leu Val Gly Ala Leu Leu Ala Ser Ala Arg His
 190 195 200

gcg tgaaaaataa tgtcggatgc ggcgtaaac 1200
 Ala
 205

<210> 2

<211> 205

<212> PRT

<213> Escherichia coli

<400> 2

Met Thr Leu Glu Trp Trp Phe Ala Tyr Leu Leu Thr Ser Ile Ile Leu
 1 5 10 15

Thr Leu Ser Pro Gly Ser Gly Ala Ile Asn Thr Met Thr Thr Ser Leu
 20 25 30

Asn His Gly Tyr Pro Ala Gly Gly Val Tyr Cys Trp Ala Ser Asp Arg
 35 40 45

Thr Gly Asp Ser Tyr Cys Ala Gly Trp Arg Gly Val Gly Thr Leu Phe
 50 55 60

Ser Arg Ser Val Ile Ala Phe Glu Val Leu Lys Trp Ala Gly Ala Ala
 65 70 75 80

Tyr Leu Ile Trp Leu Gly Ile Gln Gln Trp Arg Ala Ala Gly Ala Ile
 85 90 95

Asp Leu Lys Ser Leu Ala Ser Thr Gln Ser Arg Arg His Leu Phe Gln
 100 105 110

Arg Ala Val Phe Val Asn Leu Thr Asn Pro Lys Ser Ile Val Phe Leu
 115 120 125

Ala Ala Leu Phe Pro Gln Phe Ile Met Pro Gln Gln Pro Gln Leu Met
 130 135 140

Gln Tyr Ile Val Leu Gly Val Thr Thr Ile Val Val Asp Ile Ile Val
 145 150 155 160

Met Ile Gly Tyr Ala Thr Leu Ala Gln Arg Ile Ala Leu Trp Ile Lys

165

170

175

Gly	Pro	Lys	Gln	Met	Lys	Ala	Leu	Asn	Lys	Ile	Phe	Gly	Ser	Leu	Phe
			180					185					190		
Met	Leu	Val	Gly	Ala	Leu	Leu	Ala	Ser	Ala	Arg	His	Ala			
		195					200					205			

09847392-050301